



# City of Marco Island

Meeting Date: September 3, 2019  
To: City Council  
From: Jeffrey E. Poteet, General Manager- Water & Sewer  
Through: Mike McNees, City Manager  
Re: Water and Sewer (W&S) Departmental Report

Both the City's drinking water and wastewater operations are in compliance with Florida Department of Environmental Protection (FDEP) regulations and all other regulatory entity requirements. The Water and Sewer (W&S) Department is operating within the approved budget.

## Marco Shores Alternative Water and Sewer Improvements Project

### **\*\*Lane Closure\*\***

Expect delays leaving the Island for a 6-week period, beginning on 9/9/19. Portions of one north bound lane will be closed on North Collier Blvd. from the Judge SS Jolley Bridge to Yellowbird St. Both southbound lanes and one northbound lane will remain open. Electronic message boards will be strategically placed to notify drivers of the potential delay, the public will be notified by Twitter and the City website. Use SR92 as an alternate route to leave the island during heavy traffic flow times 3-6 PM.

The pipeline work along Collier Blvd. north of Marco Island is complete. The pipeline connections at the horizontal drilling locations north of Marco Island are planned for completion in September. There will be some traffic lane closures associated with the connections, north of the island. The pipeline drilling work on Collier Blvd. within Marco Island will commence on 9/9/19 (lane closures associated with this portion of the project highlighted above). All lane closures on Collier Blvd within Marco Island associated with this project are expected to be complete before the Thanksgiving holiday when seasonal residents return. There will be other lane closures on E. Elkcam Cir., 6<sup>TH</sup> Ave., St. Waikiki Ct., and Barfield Dr. N. as construction progresses in those areas. City staff is coordinating with the contractor to minimize traffic disruptions. The demolition of the Marco Shores wastewater treatment plant is scheduled for February. The project funding is within the approved budget and final completion is scheduled for March.



### **September Disinfection**

The City of Marco Island (City) will be temporarily changing the disinfection process for the potable (drinking) water supply for the Marco Island Drinking Water Service Area. From 9/1/19, through 9/30/19, the water will be disinfected with free chlorine rather than chlorine combined with ammonia (chloramines). This conversion to free chlorine (a stronger disinfectant) from chloramines allows the City to perform an annual water distribution system purge, as recommended by the FDEP for water utilities using chloramines as their primary disinfectant.

## FDOT Collier Blvd Road Construction North of Marco Island

The Florida Department of Transportation (FDOT) is ready to begin the resurfacing of Collier Blvd. (SR 951) from Fiddler's Creek south to the Judge SS Jolley Bridge. The resurfacing project includes: shoulder treatment, drainage improvements, curb and gutters, sidewalks restoration, relocation of traffic guardrails and traffic signal lights. The proposed starting date is 8/26/19. FDOT lane closures are planned to be only at night from 10:00 pm until 6:00 am. Variable electronic message signs will be used during active night operations. The project's duration per the contract is 300 days. The City will participate in the bi-weekly construction progress meetings.

Water Service Interruptions with Boil Water Notice (BWN)			
Month	Number of Service Calls Resulting in a BWN	Number of Customers Affected in the Month	Large Interruptions 50 Customer or More
Aug-18	4	115	2 Condos-74 Units
Sept-18	4	432	1 Condo-256 Units
Oct-18	6	287	1 Condo-120 Units
Nov-18	2	44	0 Condo
Dec-18	2	69	1 Condo
Jan-19	3	87	1 Condo
Feb-19	4	70	1 Condo-Owners Request
Mar-19	4	1023	All Mainsail and 1 Condo-988 Units 2 Condos-(950 Units)Both Condos Requested Service Interruption
Apr-19	2	950	0 Condo
May-19	5	138	0 Condo
June-19	11	853	2 Condos-605 Units
July-19	1	132	1 Condo-132 Units



## Treatment Plant Data

Starting Date: **7/1/2019** Rain Fall for Time Period **9.20** Inches  
Ending Date: **7/31/2019**

Aquifer Storage & Recovery				Average Daily Flow (ADF) in Million Gallons per Day (MGD)	
ASR - Injection Avg. Daily Flow	<b>0.00</b> MGD	Jul-19			
ASR - Recovery Avg. Daily Flow	<b>0.21</b> MGD				
Marco Island Drinking Water					
Combined Consumer ADF	<b>7.28</b> MGD	Max Day	7/3/2019	Max Day	9.22 MGD
NWTP Consumer ADF	<b>3.10</b> MGD		7/3/2019		3.67 MGD
SWTP Consumer ADF	<b>4.18</b> MGD		7/30/2019		5.83 MGD
Finished Water Testing					
Minimum Chlorine Residual		<b>2.30</b> mg/L			
	Maximum	Minimum		Maximum	Minimum
Turbidity	<b>0.07</b>	<b>0.00</b>	NTU	Chlorides	<b>132</b> <b>90</b> mg/L
Total Dissolved Solids	<b>365.00</b>	<b>3.00</b>	mg/L	Color	<b>10</b> <b>3</b> mg/L
P-Alkalinity	<b>6.00</b>	<b>0.00</b>	mg/L	Phosphate	<b>0.66</b> <b>0.01</b> mg/L
M-Alkalinity	<b>145.00</b>	<b>33.00</b>	mg/L	Ammonia	<b>0.95</b> <b>0.65</b> mg/L
Cal-Hardness	<b>200.00</b>	<b>80.00</b>	mg/L	Aluminum	<b>0.53</b> <b>0.02</b> mg/L
Total Hardness	<b>225.00</b>	<b>98.00</b>	mg/L	pH	<b>8.99</b> <b>8.25</b> SU
Jul-19 Marco Shores Drinking Water Purchase					
Monthly Flow - MGD			CL2 Residual - Minimum		
ADF	Total Flow	Monthly Max Day			
<b>0.177</b>	<b>5.5</b>	<b>7/14/2019</b>	<b>0.283</b>		
Jul-19 Wastewater - RWPF					
Average Flow		Monthly Max Day		Monthly Testing	
Influent	<b>2.09</b> MGD	<b>7/4/2019</b>	<b>2.594</b>	Influent	Effluent
Reuse	<b>1.36</b> MGD	<b>7/3/2019</b>	<b>3.01</b>	BOD	<b>170</b> <b>1.36</b> mg/L
Deep Well	<b>0.86</b> MGD	<b>7/9/2019</b>	<b>1.616</b>	TSS	<b>110</b> <b>0.6 U</b> mg/L
				NO3	<b>NA</b> <b>9.36</b> mg/L
Jul-19 Wastewater - Marco Shores WWTP					
Average Flow		Monthly Max Day		Monthly Testing	
Influent	<b>0.071</b> MGD	<b>7/21/2019</b>	<b>0.090</b>	Influent	Effluent
				BOD	<b>197</b> <b>1.90</b> mg/L
				TSS	<b>148</b> <b>1.60</b> mg/L